

International Symposium on Surgery for Catastrophic Epilepsy in Infants (ISCE)

The 14th annual meeting of ISS

-Towards early diagnosis and treatment-

PROGRAM & ABSTRACTS



February 18-19, 2012

**Tetsumon Memorial Hall, The University of Tokyo
Tokyo, Japan**

Sponsor	Infantile Seizure Society (ISS), Japan
Co-sponsor	Japan Brain Foundation
Support Organization	Japanese Society of Child Neurology
	Japan Epilepsy Society
	Epilepsy Surgery Society of Japan
	Asian & Oceanian Child Neurology Association
	International League Against Epilepsy
	Commission on Asian and Oceanian Affairs



WELCOME MESSAGE



It is our great pleasure and honor to announce that the International Symposium on Surgery for Catastrophic Epilepsy in Infants (ISCE) will be held in Tokyo, Japan on Feb18-19, 2012. This will be the 14th annual meeting of the Infantile Seizure Society (ISS), and is endorsed by the Pediatrics Commission and the Commission of Asian & Oceanian Affairs (CAOA) of the ILAE. We are especially grateful that our international colleagues have encouraged us to hold this conference as originally scheduled, despite the catastrophic tsunami and nuclear power plant disaster in northeast Japan last March. This will demonstrate that we are allied to fight the invisible and unreasonable fears and prejudices throughout the world since March 11.

Frequent epileptic seizures in infants cause severe epileptic encephalopathy with a catastrophic nature associated with progressive developmental delay. Early surgical intervention is essential when focal epileptogenic pathologies are identified by modern imaging techniques. It is critical, therefore, to establish the diagnosis and to start appropriate treatment as early as possible. In this symposium, we would like to focus on the state-of-art advancement in diagnosis and treatment of severe epileptic encephalopathy in infants. In addition, there will be comprehensive coverage over a broad area that includes genetics, pathophysiology, and treatment guidelines.

February is the plum blossom season in Tokyo, which means that the beautiful Japanese spring will soon arrive. We will sincerely appreciate it if you attended this meeting and participated in the lively discussions that will start the new year.



Yukio Fukuyama, MD
Chairperson, ISS
Honorary President, Asian & Oceanian
Child Neurology Association



Taisuke Otsuki, MD, PhD
President, ISCE
Director, Epilepsy Center, National
Center of Neurology and Psychiatry

ORGANIZATION

President	Taisuke Otsuki (Tokyo, Japan)
Vice-president	Kenji Sugai (Tokyo, Japan)
Chairperson of ISS	Yukio Fukuyama (Tokyo, Japan)
Vice-chairperson of ISS	Yoshihiro Takeuchi (Otsu, Japan)

Advisory board

Alexis Arzimanoglou (Lyon, France)	Shunsuke Ohtahara (Okayama, Japan)
Kai-Ping Chang (Taipei, Taiwan)	Perrine Plouin (Paris, France)
Yong-Seung Hwang (Seoul, Korea)	Raman Sankar (Los Angeles, USA)
Sunao Kaneko (Hirosaki, Japan)	Ingrid E Scheffer (Melbourne, Australia)
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Shichuo Li (Beijing, China)	Tatsuya Tanaka (Kagoshima, Japan)
Shih-Hui Lim (Singapore, Singapore)	Haluk Topaloglu (Ankara, Turkey)
Solomon L Moshe (New York, USA)	Kazuyoshi Watanabe (Nagoya, Japan)
Douglas Nordli (Chicago, USA)	

Scientific advisors

Helen Cross (London, United Kingdom)	Gary Mathern (Los Angeles, USA)
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Regional scientific advisors

Eishi Asano (Detroit, USA)	Heung-Dong Kim (Seoul, Korea)
Seung-Chyul Hong (Seoul, Korea)	Guoming Luan (Beijing, China)
Hiroshi Otsubo (Toronto, Canada)	Tai-Tong Wong (Taipei, Taiwan)

Financial committee

Shinichi Nijima (Tokyo, Japan)	Hideo Yamanouchi (Saitama, Japan)
Makiko Osawa (Tokyo, Japan)	Hitoshi Yamamoto (Kawasaki, Japan)
Takao Takahashi (Tokyo, Japan)	

Program committee

Hiroshi Baba (Nagasaki, Japan)	Shigeki Kameyama (Niigata, Japan)
Koichi Baba (Shizuoka, Japan)	Amami Kato (Osaka, Japan)
Masaharu Hayashi (Tokyo, Japan)	Kensuke Kawai (Tokyo, Japan)
Shinichi Hirose (Fukuoka, Japan)	Nobukazu Nakasato (Sendai, Japan)
Akio Ikeda (Kyoto, Japan)	Hirokazu Oguni (Tokyo, Japan)
Yushi Inoue (Shizuoka, Japan)	Yoko Ohtsuka (Okayama, Japan)

Social committee

Shinichiro Hamano (Saitama, Japan)
Toshisaburo Nagai (Osaka, Japan)

Masako Watanabe (Tokyo, Japan)

Local advisors

Tomokatsu Hori (Tokyo, Japan)
Yoshiaki Mayanagi (Tokyo, Japan)
Tadahiro Mihara (Shizuoka, Japan)

Hiroyuki Shimizu (Tokyo, Japan)
Eiju Watanabe (Tochigi, Japan)

ISCE Headquarter

Kenji Sugai (Secretary general)
Epilepsy Center, National Center of Neurology and Psychiatry
Ogawahigashi-cho, 4-1-1, Kodaira, Tokyo, 187-8551, Japan
Tel: +81-42-341-2711
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ISCE Secretariat

c/o K-Convention Co., Ltd. (Inquiry for Registration and Abstract Submission)
1-24-7-313 Shinjuku, Shinjuku-ku, Tokyo 160-0022, Japan
Tel: +81-3-5367-2382
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ISS Secretariat

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6-12-17-201 Minami-Shinagawa, Shinagawa-ku, Tokyo 140-0004, Japan
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Email: iss-contact@iss-jpn.info

Host organizations

Infantile Seizure Society (ISS), Fully endorsed by International League Against Epilepsy (ILAE) Pediatrics Commission and Commission on Asian and Oceanian Affairs (CAOA)

Sponsoring Organization

Sponsor Infantile Seizure Society (ISS), Japan

Co-sponsor Japan Brain Foundation

Support Organization Japanese Society of Child Neurology
Japan Epilepsy Society
Epilepsy Surgery Society of Japan
Asian & Oceanian Child Neurology Association

ACKNOWLEDGEMENT

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(Alphabetical order)

The organizing committee of ISCE would like to express sincere thanks to above sponsors for the support to this symposium.

Taisuke Otsuki, MD PhD
President, ISCE

GENERAL INFORMATION

Main topics

Epileptic encephalopathy in infancy: etiology and epidemiology, pathophysiology, diagnostic neuroimaging, EEG, MEG, pre-surgical evaluation, surgical and non-surgical treatment, outcome, early diagnosis and treatment

Target attendees

Pediatricians, neurologists, neurosurgeons, epileptologists, basic and clinical researchers who are interested in epilepsy and patient care in children

Official language

English only

Visa application

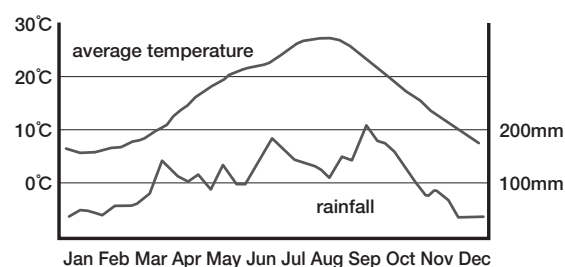
To visit Japan, you must carry a valid passport. A visa is required for citizens of countries which do not have visa-exempt agreements with Japan. Please contact the nearest Japanese Embassy or Consulate for visa application. Ministry of Foreign Affairs of Japan:

http://www.mofa.go.jp/j_info/visit/Visa/index.html

Climate

On the conference term, it is in winter season and still chilly but getting warm day by day in Tokyo. Consider bring an overcoat or a jacket since meeting room temperatures and personal comfort levels vary.

Average temperature in February in Tokyo: Highest 10°C, Lowest 2.4°C



Currency exchange

Japanese yen cash or major credit cards are acceptable at regular stores and restaurants.

Electricity

Electric current is uniformly 100 volts, AC, throughout Japan.

Official Certificate for Attendance and CME Points

An official certificate for attendance at the ISCE will be delivered to all participants. To Japanese colleagues, authorized CME units will be rewarded by three societies as following CME Points.

Society	Attendance	Authorship	
		Presenter	Co-author
Japan Pediatric Society	5u	0u	0u
Japan Epilepsy Society	5u	20u	0u
Japanese Society of Child Neurology	8u	4u	1u

(Max sum up to 12 units)

U=unit

Liabilities

All participants and accompanying persons should be responsible for their own medical, accident and other necessary insurance.

REGISTRATION FEE AND CATEGORY

Category	Early registration until Dec. 15 2011	Late registration after Dec. 16 2011/ Onsite
ISS*/AOCNA** Member	JPY18,000-	JPY22,000-
Non Member	JPY21,000-	JPY25,000-
Student	JPY4,000-	JPY5,000-
Junior Physician***	JPY9,000-	JPY10,000-
Accompanying Person	Free	Free

JPY=Japanese Yen, ISS*=Infantile Seizure Society, AOCNA**=Asian & Oceanian Child Neurology Association

Junior Physician*** =under 35 years of age; Students of post-graduate course are also eligible to this category.

Copy of official documents such as a student's identification or a certificate will be required.

※ Admission fee for Welcome party, February 18th (Sat), shall be charged to Japanese participants only: JPY3,000. Overseas participants are welcomed free of charge.

Conference registrants are entitled for the followings:

- Access to all scientific sessions, poster presentations
- Daily coffee/ tea breaks and lunches for 2 days
- Get-together party
- Welcome party (extra charge for Japanese participants)
- Conference satchel with program, abstract and related information, conference badge

Accompanying Persons are entitled for the followings:

- Get-together party, Welcome party
- Conference badge

On-site Registration

Registration desk will open at

8:00AM-6:00PM on 18th Feb.

7:30AM-6:00PM on 19th Feb.

Please come to the Registration desk, located in front of the meeting room to register.

Payment must be made in **cash (Japanese Yen) only**.

Social Program

Get-together party (17th Feb, Fri 19:00-21:00)

Place: French Restaurant "Lever Son Verre Hongo"

URL: http://www.leversonverre-tokyo.com/restaurant_hongou/index.html

Address: 1F, Hotel Forest Hongo, 6-16-4 Hongo, Bunkyo-ku, Tokyo

Forest Hongo URL: <http://www.forest-hongo.com/>

TEL : +81-3-5840-8088

Style: Buffet Dinner

Welcome party

Date & Time: 18th Feb, Sat 19:00-21:00

Place: Restaurant "Capo Pellicano"

13th floor of the Faculty of Medicine Experimental Research Bldg, Hongo Campus, The University of Tokyo

Style: Buffet Dinner

INSTRUCTION FOR ORAL AND POSTER PRESENTATIONS

Instructions for Oral Presentations

1. Every speaker is requested to finish up an arrangement necessary for data project two hours before the respective presentation at the latest, by contacting the staff of the PC Data Registration desk, located in front of the meeting room. It is suggested you to save your final slides in a USB flash memory or CD-R and bring to the PC Data Registration Desk.
2. All speakers are requested to strictly observe the allotted presentation time. Since the conference schedule is tight, session chairpersons will strictly enforce the timing. The staff will press the buzzer for time-reminding.
3. It is required to use the laptop prepared by the conference for stable computer system connection. For any reason that you must use your own laptop, please inform the secretariat in advance.
4. The conference will have a laptop set up at the podium for all presenters. A remote control for changing the slides will be prepared; the presenter can control the slides on his/her own.
5. All presentation slides should be prepared by "Microsoft Office PowerPoint 2003, 2007, or 2010."
6. A single projection will be available. Windows-operated computers will be prepared the organizer. If your slides are prepared by Mac system, the data may deform after its transfer to the Windows system.
Please check and correct this possible deformation at the PC Registration Desk.
7. Video tape presentation is not available. If you need to use video records, please transfer them to the computer in a digital form (Windows Media player). The projection does not support Full HD video mode, please avoid this kind of file format. If you prepare to use a Mac laptop, please bring the Apple DVI to VGA display adapter. The connector of the projector is D-SUB, be sure the correct adapter is brought with you.
8. Please note the time allocated for each presentation as follows:
20 minutes for presentation followed by 5 minutes of discussion for invited speakers and 10 minutes for presentation followed by 3 minutes of discussion for free paper session and case discussion.

Instructions for Discussion

1. Active discussions from the floor are encouraged as far as the time is available.
2. All aspects of discussion session shall be ordered by due consideration of chairpersons.
3. Anyone who wishes to raise a question/discussion can raise their hands and wait for an order of chairpersons. To begin your discussion, please identify yourself first.

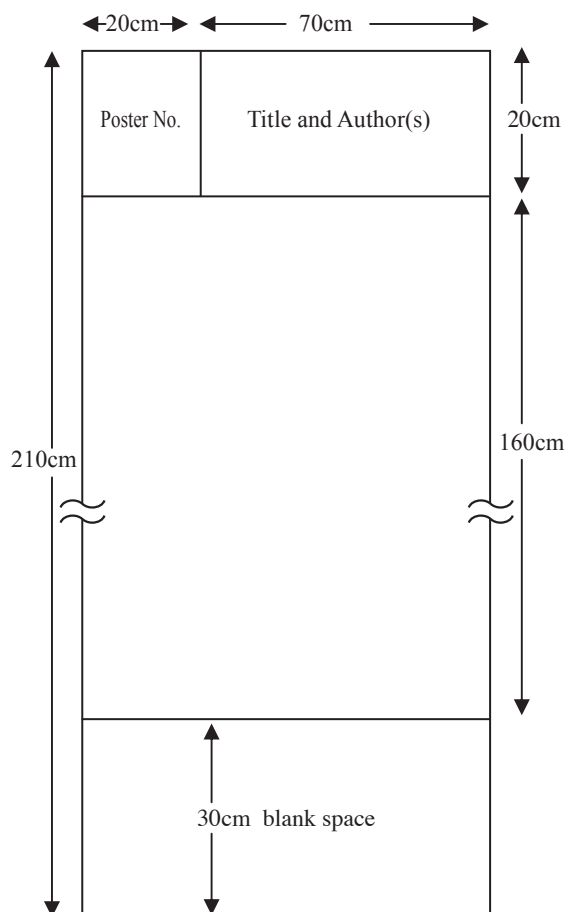
Instructions for Poster Presentations

Poster Presentation Operation Hours: Poster set-up time: Feb 18 (Sat) 10:30 - 11:00

Poster removal time: Feb 19 (Sun) 15:30 - 17:00

Location: Poster Session Space, 14th floor, Faculty of Medicine Experimental Research Building, Hongo Campus, University of Tokyo

1. Necessary office supplies for mounting will be provided on-site. Staple guns are prohibited for mounting. Conference will provide free pins for poster presenters.
2. In the event of posters not removed after 17:00 on February 19, the staff will remove them without further notice.
3. All poster board has a surface of 90 cm wide and 180 cm high. Top corner space will be used to place the poster number, pre-fixed by the secretariat.
4. Poster judges will evaluate all posters during Coffee Break & Lunch time. Presenters are suggested to be standby at the site of respective posters for answering questions during those time period.
5. Conference will present awards at the Welcome-party on February 18th. We strongly encourage all free paper presenters to stay on-site to receive the award.



Awards

***Japanese Society of Child Neurology Award (JCSN Award)** for 3 presenters

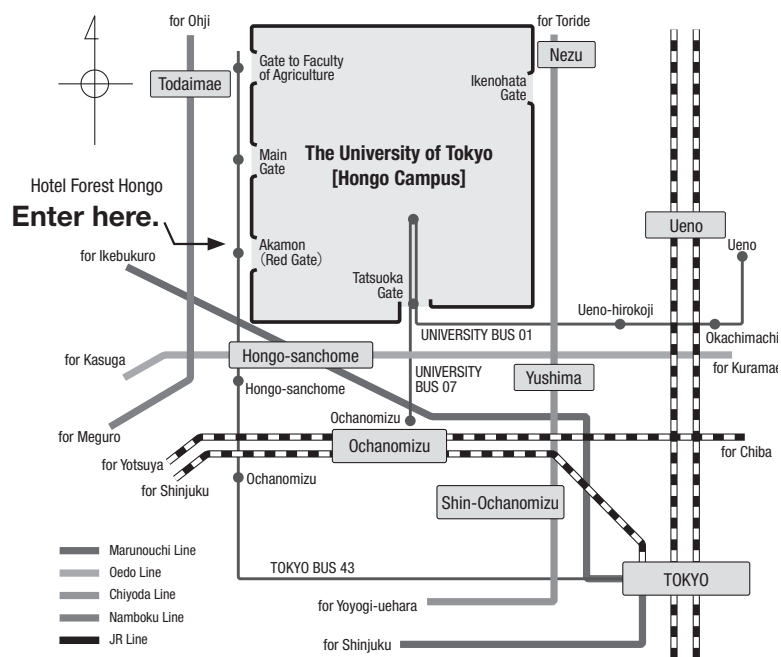
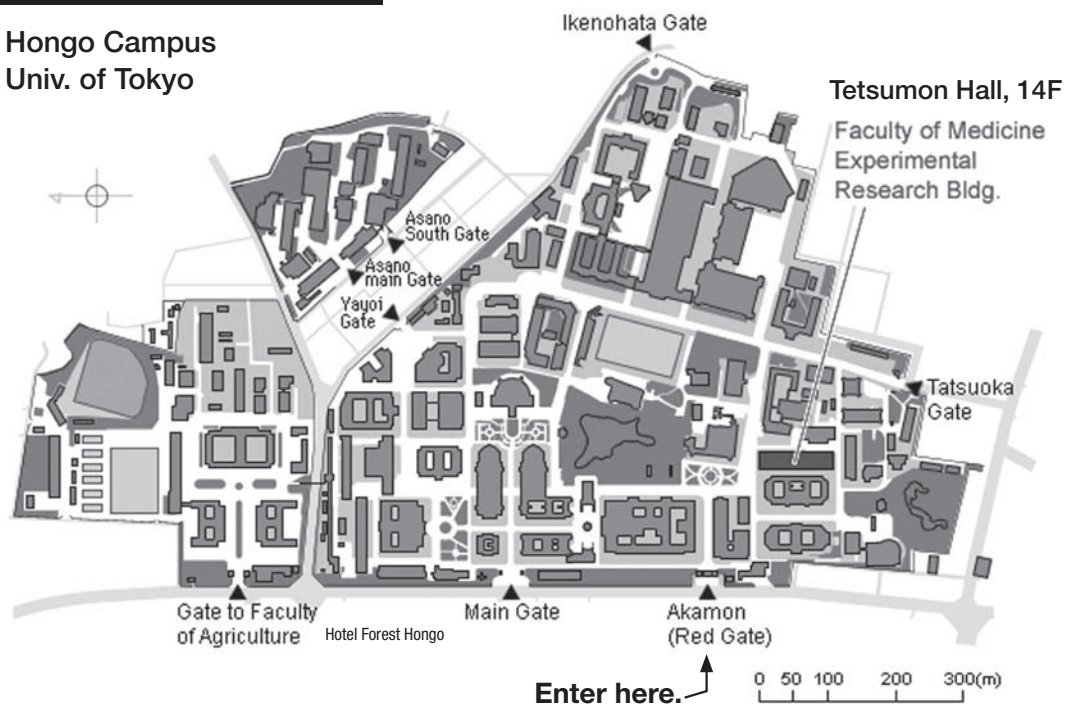
***ISCE Award** for 4 presenters

***ISS Nihon Kohden Award** for 6 presenters

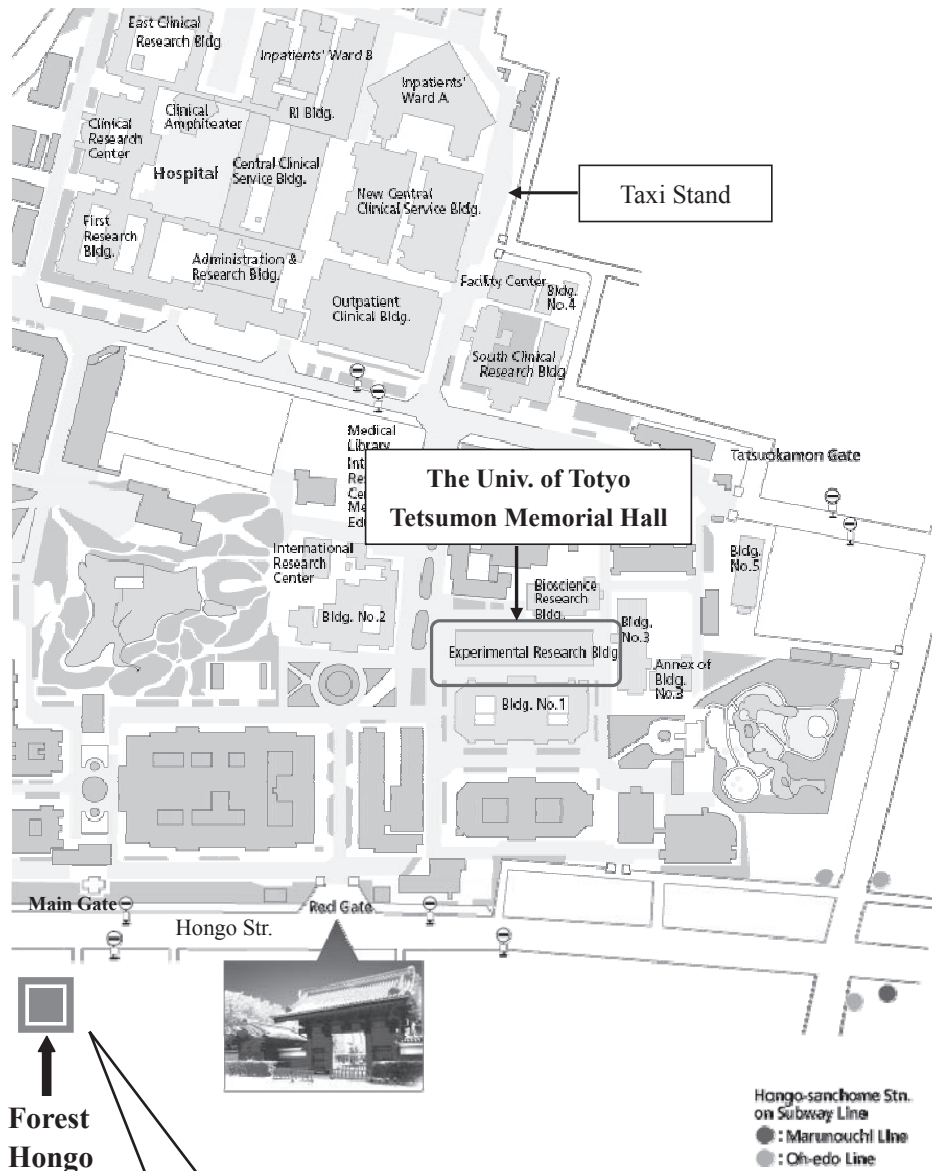
Awards will be presented at the welcome-party on February 18th

VENUE

Hongo Campus
Univ. of Tokyo



Venue Tetsumon Memorial Hall, 14th floor of the Faculty of Medicine Experimental Research Bldg.,
Hongo Campus, The University of Tokyo,
7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8654, Tokyo, Japan
http://www.u-tokyo.ac.jp/campusmap/cam01_02_09_e.html
※Please enter through "Akamon"(Red gate).



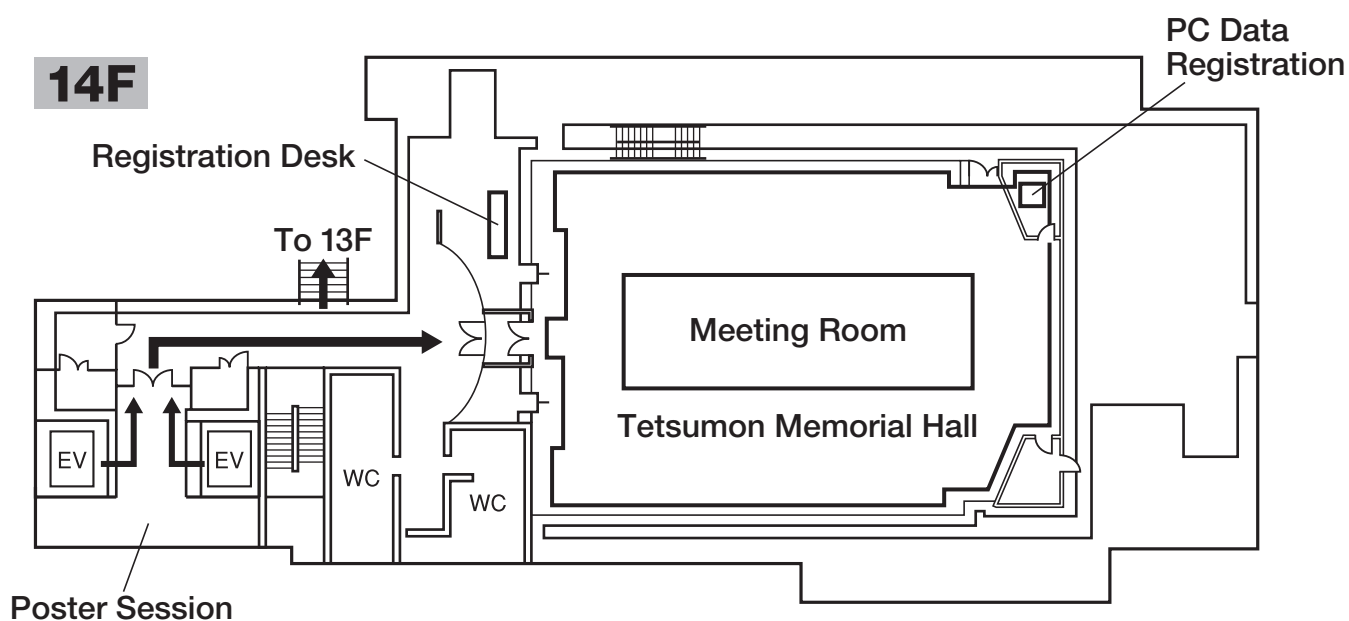
Forest
Hongo



- About 100m from Forest Hongo to Main Gate
- About 250m from Main Gate to Red Gate

FLOOR PLAN

Tetsumon Memorial Hall, 14th floor of the
Faculty of Medicine Experimental Research Building, Hongo Campus,
The University of Tokyo



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OVERVIEW of DAILY PROGRAM

Day 1 (18th Feb, Sat)		Day 2 (19th Feb, Sun)	
8:00	Registration	8:00	Morning session
8:55	Opening remarks	9:00	Session V Patient selection and pre-surgical evaluation II
9:00	Session I Epidemiology and etiology		Break
10:00		10:00	Session VI Surgical strategy and outcome
11:00	Session II Pathophysiology	11:00	
12:00	Lunch / Poster view	12:00	Lunch / Poster view
13:00	Luncheon session	13:00	Luncheon session
14:00	Session III New topics	14:00	CAOA-ISS joint session: Epilepsy surgery - pros and cons -
15:00		15:00	Special session: Towards early diagnosis and treatment
16:00	Surgery and Free paper session	16:00	
17:00	Session IV Patient selection and pre-surgical evaluation I	16:30	Closing remarks
18:00	Evening session Case discussion	16:35	
19:00	Welcome party / Awarding ceremony		

(17th Feb, Fri)	
16:30	ISS Council Board meeting
17:00	
18:00	
19:00	Get-together party

PROGRAM

The 14th annual meeting of ISS

International Symposium on Surgery for Catastrophic Epilepsy in Infants (ISCE)

PROGRAM - ORAL PRESENTATIONS

DAY1, SATURDAY, FEBRUARY 18

08:00-09:00 **Registration**

08:55 **Opening Remarks**

Taisuke OTSUKI, President of ISCE

09:00 **Session I: Epidemiology and Etiology**

Chairpersons: **Yong-Seung HWANG** Pediatrics, Seoul National University College of Medicine, Seoul, Korea

Yoko OHTSUKA Child Neurology, Okayama University Graduate School of Medicine, Okayama, Japan

09:00-09:25

APPLICATION OF THE NEW ILAE ORGANISATION TO INFANTILE EPILEPSY SYNDROMES

Ingrid E SCHEFFER, Paediatrics, Royal Children's Hospital, Melbourne, Australia

09:25-09:50

**EPIDEMOLOGY OF CATASTROPHIC EPILEPSY IN INFANCY AND EARLY CHILDHOOD
RESULT OF THE FAR-EAST ASIA CATASTROPHIC EPILEPSY (FACE) STUDY GROUP**

Hirokazu OGUNI, Pediatrics, Tokyo Women's Medical University, Tokyo, Japan

09:50-10:15

**SURGICAL PATHOLOGIC FEATURES OF FOCAL CORTICAL DYSPLASIA AND
RELATED CONDITIONS IN INFANTS**

Akiyoshi KAKITA, Neuropathology, University of Niigata, Niigata, Japan

10:15-10:40

NEUROINFLAMMATION IN EPILEPTIC ENCEPHALOPATHY

Ji Eun CHOI, Pediatrics, Seoul National University Boramae Hospital,
Seoul National University, Seoul, Korea

10:40-10:55

Break

10:55 Session II: Pathophysiology

Chairpersons: **Kai-Ping CHANG** Pediatrics, Taipei Veterans General Hospital, Taipei, Taiwan
Shinichi Hirose Pediatrics, Fukuoka University, Fukuoka, Japan

10:55-11:20

GENETIC MECHANISMS OF EPILEPTIC ENCEPHALOPATHIES IN INFANTS

Mitsuhiro KATO, Pediatrics, Yamagata University, Yamagata, Japan

11:20-11:45

BASIC MECHANISMS OF CATASTROPHIC EPILEPSY: OVERVIEW FROM ANIMAL MODELS

Aristea S GALANOPOULOU, Neurology Neuroscience, Albert Einstein College of Medicine,
New York, USA

11:45-12:10

EEG OF AGE-DEPENDENT EPILEPTIC ENCEPHALOPATHY IN INFANCY AND EARLY CHILDHOOD

Katsuhiro KOBAYASHI, Child Neurology, Okayama University, Okayama, Japan

12:10-12:35

BRIDGING FROM EXPERIMENTAL FOCAL CORTICAL DYSPLASIA TO INTRACTABLE EPILEPSY

Tatsuya TANAKA, Neurosurgery, Asahikawa Medical College, Asahikawa, Japan

12:35-13:25

Lunch / Poster view

13:25-14:00

Luncheon session

Sponsored by GlaxoSmithKline K.K.

Chairperson: **Shin-ichi NIIJIMA** Pediatrics, Juntendo University, Tokyo, Japan

GENETIC AND AUTOIMMUNE AETIOLOGIES OF INFANTILE EPILEPSIES

Ingrid E SCHEFFER, Paediatric Neurology Research, Royal Children's Hospital, Melbourne, Australia

14:00 Session III: New Topics

Chairpersons: **Hitoshi YAMAMOTO** Pediatrics, St Marianna University School of Medicine, Kawasaki, Japan
Toshisaburo NAGAI Pediatrics, Osaka University Graduate School of Medicine, Osaka, Japan

14:00-14:25

ABNORMAL CHLORIDE TRANSPORTATION IN CORTICAL DYSPLASIA

Atsuo FUKUDA, Physiology, Hamamatsu University, Hamamatsu, Japan

14:25-14:50

MITOCHONDRIAL RESPIRATORY CHAIN IN EPILEPTIC ENCEPHALOPATHY

Hoon-Chul KANG, Pediatrics, Yonsei University, Seoul, Korea

14:50-15:15

DTI AND fMRI IN PEDIATRIC EPILEPTIC ENCEPHALOPATHY

Seung-Koo LEE, Radiology, Yonsei University, Seoul, Korea

15:15-15:40

FUNCTIONAL NEUROIMAGING IN EARLY INFANTILE EPILEPTIC ENCEPHALOPATHY

Kazuhiro HAGINOYA, Pediatrics, Tohoku University, Sendai, Japan

15:40-15:45

Break

Surgery and Free Paper Session

Chairpersons: Tai-Tong WONG Neurosurgery, Taipei Veterans General Hospital, Taipei, Taiwan

Kensuke KAWAI Neurosurgery, The University of Tokyo, Tokyo, Japan

15:45-16:10 Key Note Lecture

VERTICAL HEMISPHEROTOMY : DELALANDE'S APPROACH

Olivier DELALANDE, Neurosurgery, Fondation Ophtalmologique A. de Rothschild, Paris, France

16:10-17:05 Free Paper Session

MODIFICATION OF DELALANDE'S VERTICAL HEMISPHEROTOMY

Kensuke KAWAI, Department of Neurosurgery, The University of Tokyo, Tokyo, Japan

OUTCOME AFTER HEMISPHERECTOMY IN PATIENTS WITH REFRACTORY HEMISPHERICAL EPILEPSY: DELALANDE'S VERSUS FUNCTIONAL HEMISPHEROTOMY

Manas PANGRAHI, Department of Neurosciences, Krishna Institute of Medical Sciences, India

POSTERIOR QUADRANCTOMY FOR PATIENT WITH STURGE-WEBER SYNDROME

Hidenori SUGANO, Department of Neurosurgery, Juntendo University, Tokyo, Japan

IMPROVED OUTCOME IN YOUNG CHILDREN AFTER EPILEPSY SURGERY: ONE CENTER'S EXPERIENCE

Amy Z CREPEAU, Department of Neurology, Mayo Clinic, Rochester, Minnesota, United States

17:05 Session IV: Patient Selection and Pre-surgical Evaluation I

Chairperson: Kenji SUGAI Child Neurology, National Center of Neurology and Psychiatry, Tokyo, Japan

17:05-17:30

ROLE OF MRI IN PATIENT SELECTION FOR SURGICAL TREATMENT OF CATASTROPHIC EPILEPSY IN INFANCY

Elysa WIDJAJA, Diagnostic Imaging, Hospital for Sick Children, Toronto, Canada

17:30-17:55

**ROLE OF PET IN PATIENT SELECTION AND SURGICAL PLANNING FOR
CATASTROPHIC EPILEPSY IN PEDIATRICS**

Noriko SALAMON, Radiology, David Geffen School of Medicine at UCLA, USA

17:55

Evening session

Sponsored by Eisai Co., Ltd. / Nobelpharma Co., Ltd.

Chairpersons: Eishi ASANO Pediatrics, Children's Hospital of Michigan, Detroit, USA

Shih-Hui LIM Neurology, Singapore General Hospital, Singapore

17:55-18:20

CLINICAL-ELECTROGRAPHIC EXPRESSION OF INFANTILE SEIZURES

Munhyang LEE, Pediatrics, Samsung Medical Center, Seoul, Korea

18:20-18:50

Case discussion

**POSTERIOR DISCONNECTION IN EARLY INFANCY TO TREAT INTRACTABLE EPILEPSY
WITH MULTILobar CORTICAL DYSPLASIA**

Qin-Chuan LIANG, Department of Neurosurgery, Tangdu Hospital,
The Fourth Military Medical University, China

**UNUSUAL COMMISSURAL FIBERS OF CORPUS CALLOSUM IN A PEDIATRIC PATIENT WITH
SUBCORTICAL BAND HETEROTOPIA AND TOTAL CALLOSOTOMY FOR DROP ATTACKS: CASE REPORT**

Koji IIDA, Neurosurgery, Hiroshima University Hospital, Hiroshima, Japan

19:00-21:00

Welcome Party

Awarding Ceremony

DAY2, SUNDAY, FEBRUARY 19

08:00-08:45

Morning session

Sponsored by NIHON KOHDEN CORPORATION

Chairperson: Makiko OSAWA Pediatrics, Tokyo Women's Medical University, Tokyo, Japan

EPILEPSY'S EVOLUTION: FOCAL LESIONS AND THE DEVELOPING BRAIN

Elaine WYLLIE, Epilepsy Center, Cleveland Clinic, Cleveland, USA

08:45 Session V: Patient Selection and Pre-surgical Evaluation II

Chairpersons: **Nobukazu NAKASATO** Epileptology, Tohoku University Graduate School of Medicine, Sendai, Japan
Hiroshi OTSUBO Neurology, The Hospital for Sick Children, University of Toronto, Toronto, Canada

08:45-09:10

ROLES OF SCALP EEG AND INTRACRANIAL ECoG IN PATIENT SELECTION AND SURGICAL PLANNING FOR CATASTROPHIC EPILEPSY

Eishi ASANO, Pediatrics, Children's Hospital of Michigan, Wayne State University, Michigan, MI, USA

09:10-09:35

ROLE OF MEG IN PATIENT SELECTION AND SURGICAL PLANNING FOR CATASTROPHIC EPILEPSY

Hiroshi OTSUBO, Neurology, The Hospital for Sick Children, Toronto, Canada

09:35-09:50

Break

09:50 Session VI: Surgical Strategy and Outcome

Chairpersons: **Heung-Dong KIM** Pediatrics, Yonsei University College of Medicine, Seoul, Korea
Shigeki KAMEYAMA Neurosurgery, Nishi-Niigata Chuo National Hospital, Niigata, Japan

09:50-10:15

EPILEPSY SURGERY FOR FOREIGN TISSUE LESIONS IN INFANTS (EARLY CHILDHOOD)

Seung-Chyul HONG, Neurosurgery, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea

10:15-10:40

EPILEPSY SURGERY FOR FOCAL CORTICAL DYSPLASIA IN INFANCY: INDICATION, SURGICAL STRATEGY AND OUTCOME

Prasanna JAYAKAR, Pediatrics, Miami Children's Hospital, Miami, USA

10:40-11:05

EPILEPSY SURGERY FOR HEMISPHERIC SYNDROMES IN INFANTS

Christine BULTEAU, Pediatric Neurosurgery, Fondation Rothschild, Paris, France

11:05-11:30

SURGICAL AND NON-SURGICAL MANAGEMENT OF CATASTROPHIC EPILEPSY WITH MRI-NEGATIVE LESIONS IN INFANTS

Heung Dong KIM, Pediatric Neurology, Yonsei University, Seoul, Korea

11:30-11:55

MOTOR AND COGNITIVE OUTCOME AFTER EPILEPSY SURGERY IN CHILDREN WITH CATASTROPHIC EPILEPSY

Kees PJ BRAUN, Child Neurology, University Medical Center Utrecht, Utrecht, The Netherlands

11:55-12:45

Lunch / Poster view

12:45-13:30

Luncheon session

Sponsored by UCB Japan Co., Ltd.

Chairperson: Tatsuya TANAKA Neurosurgery, Asahikawa Medical College, Asahikawa, Japan

**SURGICAL TREATMENT OF CATASTROPHIC EPILEPSY IN CHILDREN:
REVERSING THE EPILEPTIC ENCEPHALOPATHY**

Gary W MATHERN, Neurosurgery, University of California, Los Angeles, USA

13:30 **CAOA-ISS Joint Session: Epilepsy Surgery - Pros and Cons -**

Chairpersons: Gary MATHERN Neurosurgery, University of California Los Angeles, Los Angeles, USA

Hirokazu OGUNI Pediatrics, Tokyo Women's Medical University, Tokyo, Japan

Callosotomy for Catastrophic Epilepsy in Infants

13:30-13:50

**SURGICAL AND DEVELOPMENTAL OUTCOME AFTER CALLOSOTOMY FOR WEST SYNDROME WITHOUT
RESECTABLE MRI LESION: SURGICAL TIMING AND PREVENTION OF DEVELOPMENTAL DELAY**

Hiroshi BABA, Neurosurgery, National Nagasaki Medical Center, Nagasaki, Japan

13:50-14:10

CALLOSOTOMY FOR CATASTROPHIC EPILEPSY IN INFANTS. CONS: KETOGENIC DIET

Jeehun LEE, Pediatrics, Samsung Medical Center, Sungyunkwan University School of Medicine, Seoul, Korea

14:10-14:20

Discussion

Hemispherectomy for Rasmussen's Syndrome in Early Childhood

14:20-14:40

HEMISPHERECTOMY FOR RASMUSSEN'S SYNDROME IN EARLY CHILDHOOD

Guoming LUAN, Functional Neurosurgery, Epilepsy Center, Beijing Sanbo Brain Hospital,
Capital Medicine University, Beijing, China

14:40-15:00

**HEMISPHERECTOMY FOR RASMUSSEN'S SYNDROME IN EARLY CHILDFOOD. CONS:
IMMUNOTHERAPY**

Yukitoshi TAKAHASHI, Pediatrics, Shizuoka Institute of Epilepsy and Neurological Disorders, Shizuoka, Japan

15:00-15:10

Discussion

15:10 Special Session: Towards Early Diagnosis and Treatment

Sponsored by Pfizer Japan Inc.

Chairpersons: **Hans HOLTHAUSEN** Neuropediatric Clinic and Clinic for Neurorehabilitation,
Epilepsy Center for Children and Adolescents, Vogtareuth, Germany

Yushi INOUE Epileptology, Shizuoka Institute of Epilepsy and Neurological Disorders, Shizuoka, Japan

15:10-15:35

TOWARDS EARLY DIAGNOSIS AND TREATMENT : TO SAVE CHILDREN FROM CATASTROPHIC EPILEPSY

Hans HOLTHAUSEN, Neuropediatric Clinic and Clinic for Neurorehabilitation,
Epilepsy Center for Children and Adolescents, Vogtareuth, Germany

15:35-16:00

NICE GUIDELINE AND MANAGEMENT ALGORITHM: FOR PEDIATRIC EPILEPSY PATIENTS

Sophia VARADKAR, Pediatrics, Great Ormond St Hospital for Children, London, UK

16:00-16:30

What to do in my country -General discussion-

Designated Discussants

Kai-Ping CHANG, Pediatrics, Taipei Veteran's General Hospital, Taipei

Yong-Seung HWANG, Pediatrics, Seoul National University, Seoul

Kenji SUGAI, Child Neurology, National Center of Neurology and Psychiatry, Tokyo, Japan

16:30- Closing Remarks

PROGRAM- POSTER SESSION

P-1 Basic

PHARMACORESISTANCE OF EPILEPTIFORM ACTIVITY IN IMMATURE RAT TEMPORAL CORTEX

Abdul WAHAB, Pakistan Institute of Neurophysiology, Charité Universitätsmedizin Berlin

P-2 Basic

EFFECTS OF RECURRENT NEONATAL SEIZURES ON THE EXPRESSION OF GLYCINE RECEPTOR α 1 AND α 2 SUBUNITS IN THE RAT HIPPOCAMPUS

Li Xing FANG, China Department of Pediatrics, the Second Xiangya Hospital, Central South University

P-3 Basic

EFFECTS OF PROGESTERONE AND EXTRACT OF ACORI- GRAMINEIRHIZOMA ON γ -AM INOBUTYRIC ACID A RECEPTOR α 1 SUBUNIT EXPRESSION IN CORTEX OF THE RAT AFTER RECURRENT SEIZURES

Ding-an MAO, China Department of Pediatrics, the Second Xiangya Hospital, Central South University

P-4 Basic

EFFECTS OF PROGESTERONE ON GLUTAMATE TRANSPORTER 2 AND GABA TRANSPORTE 1 EXPRESSION IN DEVELOPING RAT BRAIN AFTER RECURRENT SEIZURES

Ling-juan LIU, China Department of Pediatrics, the Second Xiangya Hospital, Central South University

P-5 Epidemiology

PREDICTORS AND COURSE OF MEDICALLY INTRACTABLE EPILEPSY IN YOUNG CHILDREN PRESENTING BEFORE 36 MONTHS OF AGE: A POPULATION-BASED STUDY

Elaine WIRREL, USA Child and Adolescent Neurology, Mayo Clinic

P-6 Epidemiology

FREQUENCY AND RISK FACTORS OF MORTALITY IN EARLY ONSET EPILEPSY: A POPULATION-BASED STUDY

Katherine NICKELS, USA Child and Adolescent Neurology, Mayo Clinic

P-7 Epidemiology

ABOUT 300 CASES WERE DIAGNOSED AS WEST SYNDROME PER YEAR IN JAPAN

Kazuie IINUMA, Japan Japanese Red Cross Ishinomaki Hospital

P-8 MRI

DIFFUSION TENSOR IMAGING IN CRYPTOGENIC WEST SYNDROME: TBSS ANALYSIS

Jun NATSUME, Japan Department of Pediatrics, Nagoya University Graduate School of Medicine

P-9 EEG

AMPLITUDE INTEGRATED ELECTROENCEPHALOGRAPHY

Won Seop KIM, Korea Department of Pediatrics, College of Medicine and Medical Research Institute, Chungbuk National University

P-10 MEG

MAGNETOENCEPHALOGRAPHY IS USEFUL FOR POSTSURGICAL EVALUATION IN PATIENTS WITH CATASTROPHIC EPILEPSY

Hideaki SHIRAISHI, Japan Department of Pediatrics, Hokkaido University Graduate School of Medicine

P-11 Gene

A BOY WITH INTERSTITIAL DELETION OF 2Q24.2Q24.3 INCLUDING SCN1A

Shuji HASHIMOTO, Japan Department of Pediatrics, St. Marianna University Yokohama Seibu Hospital

P-12 Gene

TWO CASES OF FAMILIAL CEREBRAL CAVERNOUS MALFORMATION CAUSED BY MUTATIONS IN CCM1

Mi-Sun YUM, Korea Department of Pediatrics Asan Medical Center Children's Hospital, University of Ulsan College of Medicine

P-13 Gene

SEIZURES IN IFAP SYNDROME: A CASE REPORT AND REVIEW OF THE LITERATURE

Junko NAKAYAMA, Japan Department of Pediatrics, Ibaraki Prefectural University of Health Sciences

P-14 Clinical

ANTINEURONAL AUTOANTIBODY IN CHEESE

Kuang-Lin LIN, Taiwan Division of Pediatric, Neurology, Chang Gung Children's Hospital, Chang Gung University College of Medicine

P-15 Clinical

ANTINEURONAL AUTOANTIBODY IN CHEESE

Huei-Shyong WANG, Taiwan Division of Pediatric, Neurology, Chang Gung Children's Hospital, Chang Gung University College of Medicine

P-16 Clinical

SIBLINGS WITH CORTICAL DYSPLASIA: THE OLDER SISTER HAD FOCAL CORTICAL DYSPLASIA AND THE YOUNGER BROTHER HAD HEMIMEGALENCEPHALY

Tatsuya FUKASAWA, Japan Department of Pediatrics, Anjo-kosei Hospital

P-17 Clinical

VIGABATRIN TREATMENT FOR WEST SYNDROME; CASE REPORTS

Reimi TSURUSAWA, Japan Department of pediatrics, Fukuoka University, Chikushi Hospital

P-18 Pathology

NEUROPATHOLOGY OF RESECTED CEREBRAL TISSUE FROM PATIENTS WITH INFANTILE SPASMS WHO UNDERWENT CORPUS CALLOSOTOMY AND SUBSEQUENT SURGERY

Keisuke TODA, Japan Department of Neurosurgery, Nagasaki Medical Center, National Hospital Organization

P-19 Pathology

HISTOPATHOLOGICAL FINDINGS OF SIBLING CASES OF FOCAL CORTICAL DYSPLASIA AND HEMIMEGALENCEPHALY

Shinsuke MARUYAMA, Japan Department of Child Neurology, National Center Hospital, National Center of Neurology and Psychiatry

P-20 Surgery

SURGICAL TREATMENT OF RASMUSSEN ENCEPHALITIS

Tomokatsu HORI, Japan Department of Neurosurgery, Tokyo Women's Medical University

P-21 Surgical Prognosis

LONG-TERM SEIZURE REMISSION AFTER CORPUS CALLOSOTOMY

Masaki IWASAKI, Japan Department of Neurosurgery, Tohoku University Graduate School of Medicine

P-22 Surgical Prognosis

THE EARLY SURGICAL INTERVENTION, WITHOUT ANTECEDENT ACTH-ZN THERAPY, IMPROVES THE LONG TERM PROGNOSIS IN PATIENTS WITH WEST SYNDROME

Kazuo OKANARU, Japan Department of Pediatrics and Child Neurology, Oita University Faculty of Medicine

P-23 Surgery

THE SURGERY OF STURGE-WEBER SYNDROME IN INFANTS AND EARLY CHILDHOOD

Changqing LIU, China Functional Neurosurgery Department Beijing Sanbo Brain Hospital, Capital Medical University Eleventh Clinical School

P-24 Surgery

HYPOTHALAMIC HAMARTOMA TREATED WITH STEREOTACTIC RADIOSURGERY USING IMAGE-GUIDED HELICAL TOMOTHERAPY

Jao-Shwann LIANG, Taiwan Department of Pediatrics, Far Eastern Memorial Hospital

P-25 Surgical Prognosis

OUTCOME OF EPILEPSY SURGERY IN CHILDREN WITH MALFORMATIONS OF CORTICAL DEVELOPMENT AFTER EVALUATION WITH NONINVASIVE PROTOCOL

Sita JAYALAKSHMI, India Department of Neurosciences, Krishna Institute of Medical Sciences

P-26 Surgery

EARLY RESECTIVE SURGERY FOR INFANTILE INTRACTABLE EPILEPSY DUE TO MALFORMATIONS OF CORTICAL DEVELOPMENT

Akio TAKAHASHI, Japan Department of Neurosurgery, National Center Hospital of Neurology and Psychiatry, Tokyo

P-27 Surgery

EFFECTIVENESS OF TOTAL CORPUS CALLOSOTOMY IN THE PATIENT WITH SUBCORTICAL BAND HETEROTOPIA

Kenjiro KIKUCHI, Japan Division of Neurology, Saitama Children's Medical Center

P-28 Surgical Prognosis

LONG-TERM DEVELOPMENTAL OUTCOME IN PATIENTS WITH WEST SYNDROME AFTER EPILEPSY SURGERY

Yoshiko IWATANI, Japan Department of Pediatrics, Osaka University Graduate School of Medicine

P-29 PET

THE USEFULNESS OF 18-FDG PET SCAN IMAGING FOR PRE-SURGICAL LOCALIZATION IN NON-LESIONAL PEDIATRIC EPILEPSY PATIENTS

Joon Won KANG, Korea Yonsei University College of Medicine

P-30 Surgical Prognosis

PROGNOSIS OF PATIENTS WITH TUBEROUS SCLEROSIS COMPLEX TREATED BY RESECTIVE SURGERY IN AN INSTITUTE

Seon Kyoung RHIE, Korea Yonsei University College of Medicine

P-31 Prognosis

LONG TERM EPILEPSY OUTCOME OF CHILDREN WITH WEST SYNDROME: RETROSPECTIVE ANALYSIS OF 135 CHILDREN TREATED AT A TERTIARY CARE CENTRE

Sheffali GULATI, India Child Neurology Division, Department of Pediatrics, All India Institute of Medical Sciences

P-32 Prognosis

CLINICAL OR EEG SCORING TO PREDICT EPILEPSY OUTCOME IN INFANTILE SPASMS?

Sheffali GULATI, India Child Neurology Division, Department of Pediatrics, All India Institute of Medical Sciences